3.10 OTHER VALUES

Significance Criteria

Significance criteria regarding noise impacts are derived from the presence and proximity of sensitive receptors, and whether predicted increases in sound levels from the proposed action would result in background levels exceeding standards set forth by the Federal Highway Administration (FHWA) for residential and commercial areas. Determinations of significance are further subject to review and comment by the U.S. Environmental Protection Agency (USEPA) and the U.S. Department of Housing and Urban Development (HUD). The City of Kenosha, having jurisdiction under 40 CFR 1508.15, also has a cooperative role in the identification of noise impacts, determination of significance, and the recommendation of mitigation measures as they appear in **Section 5.0**.

A project would be considered to pose a significant hazardous materials impact if it would: 1) Pose public health and safety hazards through release of emissions or risk of upset; 2) Not comply with all applicable laws regarding the handling of hazardous materials; 3) Involve the use, production, or disposal of materials in a manner that poses a hazard to people, or to animal or plant populations in the area affected; 4) Interfere with emergency response plans or emergency evacuation plans; or 5) Result in an increased fire hazard in areas with flammable brush, grass, or trees.

Criteria used to determine if the project would have a significant visual impact includes 1) obstruction of a scenic view from public viewing areas; 2) introduction of physical features that are substantially out of character with adjacent areas; 3) alteration of the natural landscape characteristics of the site of which the scale or degree of change appears as a substantial, obvious, and disharmonious modification of the overall scene, to the extent that it clearly dominates the view; or 4) disruption of adjacent residential areas from new nighttime lighting.

3.10.1 NOISE

Construction

Noise due to construction activities may be considered to be significant if:

- the construction activity is long-term;
- use of heavy equipment and noisy activities occur at night;
- pile driving or surface blasting is planned; and
- industry-standard noise abatement measures are not implemented for noise-producing equipment.

Operation

Federal recommendations for acceptable ambient noise levels at residential receivers are generally in the range of 55 dB L_{dn} to 65 dB L_{dn}, based upon the recommendations by the US EPA, HUD, and other Federally agencies. These criteria are typically applied to noise from transportation noise sources, but may be used to assess the compatibility of other noise sources relative to residential land uses, provided that consideration is given to potential disturbances due to impulsive sound, tonal content (whistles, music, etc.), and the prevalence of nighttime activities. For off-site traffic noise, the Federally recommendations of 65 dB would be used to determine significance.

The Tribe has adopted the City of Kenosha Noise Ordinance (**Appendix B**). For the purposes of this analysis, the adopted noise limits from on-site noise generation is 70 dB L_{dn} at the project boundary. Concentrated residential development is not present in the vicinity of the project site (with the exception of the nearby mobile home park, which is located across 60th Street at the southwestern boundary of the site away from proposed development). An airport is north of the project site: a land use which is not sensitive to noise.

ACOUSTICAL BACKGROUND AND TERMINOLOGY

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and hence are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called hertz (Hz).

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure), as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighing network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels in decibels.

Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq) over a given time period (usually one hour). The Leq is the foundation of the Day-Night Average Level noise descriptor, Ldn, and shows very good correlation with community response to noise. **Table 3.10-1** contains definitions of acoustical terminology used in this section. **Table 3.10-2** provides examples of noise sources that correspond to various sound levels.

TABLE 3.10-1
ACOUSTICAL TERMINOLOGY

Term	Definition
Acoustics	The science of sound
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of noise.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.

SOURCE: Bollard and Brennan; 2002

TABLE 3.10-2
TYPICAL A-WEIGHTED SOUND LEVELS OF COMMON NOISE SOURCES

Loudness Ratio	Decibels (dBA)	Description
128	130	Threshold of pain
64	120	Jet aircraft take-off at 100 feet
32	110	Riveting machine at operators position
16	100	Shot-gun at 200 feet
8	90	Bulldozer at 50 feet
4	80	Diesel locomotive at 300 feet
2	70	Commercial jet aircraft interior during flight
1	60	Normal conversation speech at 5-10 feet
1/2	50	Open office background level
1/4	40	Background level within a residence
1/8	30	soft whisper at 2 feet
1/16	20	Interior of recording studio

SOURCE: Bollard and Brennan; 2002

The Day-night Average Level (Ldn) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment. The Day/Night Average Sound Level (Ldn-based) noise standards are commonly used to assess noise effects associated with traffic, railroad and aircraft noise sources.

REGULATORY ENVIRONMENT

Construction Noise Levels

Noise due to construction activities may be considered to be significant if:

- the construction activity is long-term;
- use of heavy equipment and noisy activities occurs at night;
- pile driving or surface blasting is planned; and
- industry-standard noise abatement measures are not implemented for noise-producing equipment.

Operation Noise Levels

Some guidance as to the significance of changes in ambient noise levels is provided by the 1992 findings of the Federal Interagency Committee on Noise (FICON), which assessed the annoyance effects of changes in ambient noise levels resulting from aircraft operations. The FICON

recommendations are based upon studies that relate aircraft and traffic noise levels to the percentage of persons highly annoyed by the noise. Annoyance is a summary measure of the general adverse reaction of people to noise that generates speech interference, sleep disturbance, or interference with the desire for a tranquil environment.

Federal recommendations for acceptable noise levels at residential receivers are generally in the range of 55 dB L_{dn} to 65 dB L_{dn}, based upon the recommendations by the U.S. Environmental Protection Agency (USEPA), the U.S. Department of Housing and Urban Development, and other Federally agencies. These criteria are typically applied to noise from transportation noise sources, but may be used to assess the compatibility of other noise sources relative to residential land uses, provided that consideration is given to potential disturbances due to impulsive sound, tonal content (whistles, music, etc.), and the prevalence of nighttime activities.

For other noise sources, especially those that may occur over short periods of the day or night, it is common to apply noise criteria based upon hourly noise levels, making a distinction between noise levels produced during daytime and nighttime hours. Acceptable hourly noise levels in residential areas are usually considered to be in the range of 50 to 55 dB (average) during daytime hours and 45 to 50 dB (average) during nighttime hours. The lower noise level limits would be appropriate in areas that currently have low ambient noise levels. Hourly noise standards are usually expressed in terms of average (L_{eq}) or median (L_{50}) noise levels, and they often are corrected for the presence of impulsive sounds and tonal content.

Kenosha Noise Ordinance

The Menominee Nation has adopted ordinances substantially similar to those of the City of Kenosha as discussed in the Intergovernmental Agreement (**Appendix B**). The noise ordinance has set the maximum operational sound limit of 70dB (average) when measured at or within the property boundary of a receiving land use. Under the ordinance, construction noise is exempt from the criteria but limited to daytime hours from Monday through Saturday. Instead construction noise is minimized through proper equipment maintenance and operation.

SENSITIVE RECEPTORS – KENOSHA PROJECT SITE

Some land uses are considered more sensitive to ambient noise levels than others, sensitivity being a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. Residential land uses are generally more sensitive to noise than commercial and industrial land uses. Sensitive receptors adjacent and southeast of the project site consist of a small mobile home park at the northeast corner of Interstate 94 and 60th Street. Also, just south of the project site across 60th Street are rural residences adjacent to agricultural land.

The project site is located just south of the Kenosha Regional Airport within airport overlay zones AIR-1, AIR-3 and AIR-4. The airport is the predominant source of noise at the project site. Nighttime noise measurements were recorded at the intersection of 60th Street and 104th Street at the eastern boundary of the project site and at the center entrance to the project site on 60th Street. Noise measurements were also obtained 100 feet south of the centerline of 60th Street on a private road located about 300 feet east of the west entrance/exit to the existing facility. The 100-foot setback from the centerline of 60th Street appeared to be representative of the setback for the homes directly south of the project site along the south side of 60th Street. The nighttime traffic along 60th Street ranged from 10 to 20 vehicles per hour and no trucks were observed. These few vehicles on 60th Street were not included in the noise measurements. Noise generated by truck traffic on Interstate 94 dominated the ambient noise environment throughout the area. Noise levels ranged from 51 to 54 dBA (Leq) with the highest value occurring west of the site near Interstate 94. Maximum levels ranged from 58 to 59 dBA at the three locations.

In contrast to nighttime conditions, noise levels measured at approximately 1:00 PM were dominated by noise generated by traffic on 60th Street. The measured noise level was 67 dBA, with a maximum of 87 dBA. Noise levels measured later in the afternoon to characterize conditions at the end of a race ranged from 61 to 66 dBA, with maximum levels ranging form 69 to 86 dBA. These levels are slightly lower than conditions at approximately 1:00 PM and are attributable to the low number of vehicles leaving the park and traveling east on 60th Street (approximately 1 vehicle/minute).

SENSITIVE RECEPTORS – KESHENA SITE

The Keshena site is located within the Menominee Nation Reservation and currently is comprised of Casino-Bingo-Hotel facilities (as discussed in **Section 2.0**). The predominant source of noise at the Keshena site consists of traffic related to the existing facilities. There are no sensitive receptors located within ½ mile of the project site. Land uses off reservation include rural residential housing interspersed within mixed deciduous/coniferous forest. The predominant noise source off-reservation is traffic along State Highway 55. Off reservation sensitive receptors are located over a ½ mile from the project site.

3.10.2 HAZARDOUS MATERIALS

EXISTING CONDITIONS – KENOSHA PROJECT SITE

Analytical Environmental Services (AES) conducted a Phase I Environmental Site Assessment (ESA) of the Kenosha project site (**Appendix I**) in December 2004. The Phase I ESA was conducted in accordance with BIA guidelines and the American Society for Testing and Materials (ASTM) Standard Practice E 1527-00, which specifies the appropriate inquiry requirements for the innocent landowner defense under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The purpose of the Phase I ESA was to identify

environmental conditions and hazardous materials involvement that may pose a material risk to human health or to the environment, or in any way affect the proposed use of the project site.

As part of the Phase I ESA, AES performed a site reconnaissance inspection of the project site on April 19th and 20th, 2004, with follow-up visits on August 4th and 5th, 2004. The purpose was to identify current or historic hazardous materials involvement on the project site or in the vicinity of the project site. Hazardous materials involvement, or signature environmental conditions include the presence or likely presence of any hazardous materials or petroleum products that indicate an existing release, past release, or a threat of release into any structure on the property, soil, or groundwater. Signs of possible hazardous materials involvement would include any indications of underground storage tanks existing on the project site, stained soils and/or unusual odors originating from the project site, indications of an excavation or removal of soils, including patched asphalt and large debris piles, and other obvious signs of hazardous materials involvement.

During the 2004 site reconnaissance, notable features observed include two storage tanks located on the project site. A 500-gallon steel diesel fuel above ground storage tank (AST), with secondary containment, is located near the racetrack maintenance building, and is regulated by the Wisconsin Department of Commerce (EDR 2004:6), and inspected annually by the Kenosha Fire Department (Dennis Kelly, pers. comm.). The tank is used to provide fuel to tractors used on-site. No leaks or spills were evident during the April 2004 site visit. An 800-gallon diesel underground storage tank (UST) is located near the entrance to the DGP clubhouse and is used as a fuel source for the building's emergency generator. This UST is regulated by the Wisconsin Department of Commerce (EDR 2004:6), and inspected annually by the Kenosha Fire Department (Dennis Kelly, pers. comm.). The UST is double walled and is equipped with a leak detection system.

Minor quantities of non-hazardous demolition debris were observed in the northwest corner of the project site. The debris was comprised mostly of bricks and concrete. Additionally, non-hazardous metal debris were scattered throughout the site.

AES staff conducted interviews, which included contacting individuals familiar with the project site and knowledgeable of its historic and existing conditions relative to hazardous materials. Local agencies were contacted and relevant database listings of hazardous waste sites, hazardous waste generators, sites with UST's, and sites with current/previous hazardous materials involvement were reviewed (**Appendix I**). Historic aerial photographs from 1963, 1967, 1980, and 2002, as well as historic topographic maps were reviewed. Historic aerial photographs can be found in the 2004 Phase I ESA included as **Appendix I**.

A former Town of Somers Landfill is present on the northwest corner of the project site. The landfill was active from approximately 1967 to 1980. There are no records of hazardous

materials being disposed in the landfill. Five monitoring wells were installed in 1990 to the west, south, and east of the landfill. Soil and groundwater samples were collected and tested for semi-volatile organic compounds (SVOCs), pesticides, and the eight RCRA Metals (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Silver, and Selenium). All analyses were below regulatory limits (**Appendix I**).

A complete list of all hazardous and non-hazardous materials that are associated with the operations of the DGP was reviewed by AES. Waste motor oil and solvent for the machine parts washer are collected and transported off site by Safety-Kleen Inc. Manifests from Safety-Kleen that where supplied by Mr. Dennis Kelly of DGP that document the removal of waste oil and used solvents from the DGP (**Appendix I**) were also reviewed to characterize existing conditions.

REGULATORY AGENCY DATABASE REPORT

Regulatory agency databases were searched in an effort to identify records of known storage tank sites and known sites of hazardous materials generation, storage, or contamination. Databases were searched for sites and listings up to one mile from a point roughly equivalent to the center of the 223-acre project site. The environmental database review was accomplished by using the services of a computerized search firm, *Environmental Data Resources, Inc. (EDR).* EDR uses a geographical information system to plot locations of current/past hazardous materials involvement. The complete list of reviewed databases is provided in the EDR report, included in the Phase I ESA (**Appendix I**) and is summarized in **Table 3.10-3**.

The project site appeared on the State of Wisconsin UST and AST databases as the location of one (1) 500-gallon diesel AST and one (1) 800-gallon diesel UST. There were no leaks or spills listed in the database for these tanks. The database search identified one site located approximately 0.30 miles from the project site. The site is listed on the State UST database as a residence located at 11127 60th Street, Kenosha. The EDR report lists a 1,000-gallon fuel oil tank at this site (**Appendix I**).

The database search located seven individual sites within the search radius with underground storage tanks. All of these sites are at a distance greater than 0.50 miles from the project site. The tanks range in size from 1,000 gallons to 20,000 gallons and store heating oils and aviation fuels. There are no reported leaks or spills associated with any of the tanks. Due to the distance of the previously mentioned UST's from the project site and the absence of reported leaks or spills in the database report, these sites are not considered likely to impact the future uses of the project site. The database identified two sites that generate hazardous materials on-site and are listed in the Resource Conservation Recovery Information System as small quantity generators (RCRIS-SQG). The first site, Schreiber Foods Inc. is located approximately 0.60 miles northwest of the project site at 9894 52nd Street, Kenosha. The second site is the Wrought Washer Manufacturing Inc. site located approximately 0.60 miles east of the project site at 9800 55th

Street, Kenosha. There were no violations listed in the database for either site, therefore it is not likely that these two properties will impact future uses of the project site (**Appendix I**).

TABLE 3.10-3
DATABASES SEARCHED IN PROJECT AREA ASSESSMENT

Database	Type of Record	Agency
NPL	National Priority List	USEPA
CORRACTS[1]	RCRA[2] Corrective Actions	USEPA
SPL	State equivalent priority	STATE
SCL	State equivalent CERCLIS[3] List	STATE
CERCLIS/ NFRAP[4]	Sites currently or formerly under review by US EPA	USEPA
TSD	RCRA permitted treatment, storage, disposal facilities	USEPA
LUST	Leaking Underground Storage Tanks	State Regulatory Commission
SWLF	Permitted as solid waste landfills, incinerators or transfer stations	State/Regional Regulatory Commission
DEED RSTR	Sites with deed restrictions	STATE
CORTESE[5]	State index of properties with hazardous waste	STATE
TOXIC PITS	Toxic pits cleanup facilities	STATE
WATER WELLS	Federal and State Drinking Water Sources	USGS/STATE
RCRA Viol	RCRA violations/ enforcement actions	USEPA
TRIS	Toxic Release Inventory Database	USEPA
UST/AST	Registered underground or aboveground storage tanks	STATE

SOURCE: Environmental Data Resources, Inc., 2004
NOTES: [1]CORRACTS: Corrective Action Report System, a USEPA database of corrective actions taken at a RCRA Regulated site (also known as CARS)
[2]RCRA: Resource Conservation and Recovery Act
[3]CERCLIS: Comprehensive Environmental Response, Compensation & Liability Information System
[4]NFRAP: No Further Remedial Action Planned (archived CERCLIS sites)
[5]CORTESE: Based on input from 14 state databases

The database report identified two sites with known releases of hazardous materials. Both sites are listed on the State Leaking Underground Storage Tanks (LUST) database. The first site is the Harvey Property located at 9717 60th Street, approximately 0.75-miles southeast of the project site. The soil has been affected at this site. Due to the distance of this site from the project site, it is not likely to affect the planned uses of the project site. The second site is the Kenosha Beef International site located at 6300 121st Avenue. The site is listed as closed and therefore would not affect the project site (**Appendix I**).

There were two unmapped sites identified on the database report that do not appear to affect the Kenosha project site. Both sites are at the Kenosha Airport, approximately 0.55 miles north of the project site. The Kenosha Airport sites are on the Wisconsin Remedial Response Site Evaluation Report (WI WRRSER) database. The data comes from the Wisconsin Department of Natural Resources (WDNR) and includes information regarding location, priority, and status of sites or facilities in the state that are known to cause or have a high potential to cause

environmental pollution. It is possible that contaminants in soil and/or groundwater could migrate from the Kenosha Airport site and affect subsurface conditions at the project site. However, a half-mile is a relatively long distance for contaminants to migrate. Moreover, the anticipated groundwater flow direction is towards the east, which is away from the project site. Therefore, due to the distance of the Kenosha Airport sites in relation to the project site (0.55 miles) and the anticipated groundwater flow direction, the Kenosha Airport site is not likely to affect the planned uses of the project site (**Appendix I**).

EXISTING CONDITIONS – KESHENA SITE

AES staff conducted a site reconnaissance visit of the Keshena site on December 14-15, 2005. The 17±-acre site is the current location of the Menominee Casino-Bingo-Hotel. AES did not observe any indications of hazardous materials involvement. Chemicals present were not unusual for a facility of this type and do not pose a significant environmental risk. Notable features include an emergency generator with an attached diesel fuel tank. Tanks of this type have secondary containment with a leak detection system. There were not any signs of leaks and spills associated with the generator. Additionally, six propane tanks with a capacity of approximately 10,000 lbs and a single larger tank of approximately 40,000 lbs were present during the site visit.

REGULATORY AGENCY DATABASE REPORT

Databases were searched for sites and listings up to two miles from a point roughly equivalent to the center of the 17±-acre project site. The Keshena project site was not listed on any database as having hazardous materials involvement. Additionally, there were not any adjacent sites identified in the database report as having hazardous materials involvement.

3.10.3 VISUAL RESOURCES

KENOSHA PROJECT SITE

Significance Criteria

Local aesthetic values are reflected in the guidance documents identified in **Section 3.8.2** as *The Kenosha Corridor Land Use Plan* and the *Zoning Ordinance, City of Kenosha, Wisconsin*. Under the Land Use Plan, regional business is among the anticipated land uses for the area, while under the Zoning Ordinance, public and recreational uses are included as allowable. The City has jurisdiction by law under 40 CFR 1508.15 and special expertise by programmatic experience and agency mission under 40 CFR 1508.26. Thus, the BIA looks to the City to help determine the significance of impact to visual resources from the project alternatives.

Regional Context

The DGP site is situated at the intersection of the I-94 Corridor and the Kenosha Corridor. The I-94 Corridor constitutes the north-south axis of the region, while the Kenosha Corridor represents the east-west axis. The ecological region is comprised of grassland prairie, punctuated by pockets

of oak savannah along riparian corridors. Regional development is comprised of a regional airport, with industrial, commercial and residential development of light to moderate density along the I-94 Corridor, and moderate densities eastward, toward the City of Kenosha, along the Kenosha Corridor.

The Regional Viewshed

Within the regional context of the project site, the surrounding viewshed (**Figure 3.10-1**) is comprised of four viewing corridors, or *vistas*. Each of these vistas represents a line-of-sight that can be characterized uniquely from among the other vistas. **Vista A** (**Figure 3.10-2**) is the line-of-sight along the I-94 Corridor axis, between the I-94 Corridor and the project site. **Vista B** (**Photo A** in **Figure 3.10-3**) is the line-of-sight from the areas south of 60th Street. **Vista C** (**Photo B** in **Figure 3.10-3**) occurs along 104th Avenue, and the westbound segment of 60th Street, east of 104th Avenue (**Figure 3.10-4**). **Vista D** (**Figure 3.10-5**) is the line-of sight afforded along Highway 158 to the north of the project site, along the Kenosha Corridor axis.

Regulatory Setting

Guidance for regional aesthetic values is afforded by the local regulatory setting. The Industrial Development section of the *Kenosha Corridor Land Use Plan* identifies the area around and including the Dairyland Greyhound Park as part of a Large Scale Planned Development district, the intent of which is to have the district develop and function as a planned unit. That same section requires any new development along Highway 158 to be properly designed so as to enhance the appearance of the area.

Criteria for Analysis

The visual experience within each vista is comprised of the following constituent elements:

1. Clarity in Line of Sight—the overall visibility of the object within the viewshed, influenced by such factors as trees, buildings, topography or any other potential visual obstruction within the viewshed.

2. Duration of Visibility—the amount of time the object is exposed to viewers within the viewshed. For example, a passing commuter will experience a shorter period of viewing time than a resident within the viewshed.

3. Proximity of the Viewer—the effects of foreshortening due to the distance of the viewer from the object will influence the dominance of the object in the perspective of the viewer within the viewshed.

4. Number of Viewers—the number of viewers anticipated to experience the visual character of the object in forward-oriented view (i.e., not through a rear-view mirror). A densely populated residential district, or a busy highway within the viewshed of the object would present more viewers than unpopulated areas.

Figure 3.10-1

Figure 3.10-2

Figure 3.10-3

Figure 3.10-4

Figure 3.10-5

Identification of Vistas within the Viewshed

Vistas within the viewshed are described by expressing the strength of the viewing experience, framed within the analytical criteria listed above. While the viewing experience is personal and subjective in nature, the application of the above criteria allows for an objective, baseline assessment of the visual environment and subsequent visual impacts of the project alternatives as discussed in **Section 2.0**.

Vista A – I-94 Corridor

Vista A is primarily a commuter vista, experienced mainly by travelers along I-94 and its parallel northbound frontage road. Rolling prairie, oak trees and a retail establishment along northbound routes obscures the project site; northbound traffic does not experience any visual aspect of the DGP in frontal or lateral view. The viewing experience occurs where southbound I-94 observers experience the view of the DGP clubhouse to the southeast. For one or two, rolling landscape, tree stands and structures obscure views to the DGP Clubhouse. From a quarter-mile away, the DGP Clubhouse becomes visible for approximately one minute at a standard rate of speed. A vista from directly west of the DGP property is unattainable due to rolling terrain, trees and development.

Vista B – 60th Street

Oriented to the south façade of the DGP at 60th Street, **Vista B** is a residential and commuter vista, experienced at close proximity by eastbound and westbound travelers along 60th Street. Residential viewers are present along the south side of 60th Street, and in the recently constructed *River Crossings* housing development, approximately one-half mile to the southeast of the project site. An earthen berm approximately 10 feet high, between the southeastern detention basin and service entryway, obscures the view to the existing DGP clubhouse and parking areas from the southeast residences and corresponding segment of 60th Street (see **Lighting and Glare** below). Where the ground is level at the entryways in the central southern portion of the project site, no residential viewers are present; only commuter view occurs. Further west, trees obscure the view to the project site, until the frontage road at 60th Street, where that area's lower elevation combines with tree growth to completely obscure the project site.

Vista C – 104th Avenue

Vista C is primarily a commuter viewing corridor, oriented to the eastern side of the project site, along 104th Avenue. Some residences and industrial areas occur within this viewing corridor, along the segment of 60th Street east of 104th Avenue, and within the viewshed itself. Two of these are possibly historic structures, greater than 50 years in age, and potentially eligible for inclusion in the National Register of Historic Places, as discussed in **Section 3.6**. Other planned development is under construction in the immediate area, which gives a setting, association and

feel that are contemporary in nature, rather than historic. On the westbound approach of 60th Street, commuters experience Vista C on their right quarter.

Vista D – 52nd Street

Along the Kenosha Corridor axis, **Vista D** along Highway 158 is limited by the vertical curvature of the eastbound roadway, in addition to raised berms obstructing view on the west end of the project site. The key view for this vista occurs along the westbound approach, where directly north of the property, the clubhouse comes increasingly into view in the viewer's left quarter to provide a lateral vista overlooking the existing pond, clubhouse and racetrack. Vista D is a commuter vista, primarily visible to westbound traffic on Highway 158, for a length of approximately 1.5 miles.

Lighting and Glare

Criteria for determining significance for lighting and glare impacts to public health and safety under 40 CFR 1508.27 is by the intensity of light that overflows from the project site to sensitive receptors in the vicinity of the project site.

Vistas A and **D** offer negligible views of nighttime lighting under existing conditions. Light poles on the DGP property provide downcast lighting, limiting the distance of glare to the immediate surroundings of the parcel. The southbound approach on I-94 provides a view no closer than one-quarter mile, and experiences no resulting glare within **Vista A**. **Vista D** is buffered by distance, and in close approach, by trees and raised earth along the nearest segment of State Hwy 158.

Vistas B and **C** (**Figure 3.10-6**) expose nearby residents and traffic to limited lighting and glare in existing conditions. Within **Vista B**, the lighting exposure is buffered, as discussed above, where an earthen berm approximately 10 feet high obscures the view to the existing DGP clubhouse and parking areas from the southeast residences and corresponding segment of 60th Street between the southeastern detention basin and service entryway. Lighting is prevalent for eastbound commuters on 60th Street, along the southwestern portion of the project site. Along 104th Avenue in **Vista C**, lighting is only visible in peripheral view of passing commuters. For **Vista C**, the dominant lighting is visible in the forward-oriented view of westbound travelers along 60th Street, east of 104th Avenue.

A site visit was conducted to measure nighttime lighting and glare on the night of February 23, 2005. Using an Extech Instruments® Model 407026 heavy-duty light meter, existing lighting overflow from the project site into the surrounding areas was measured within each of the viewsheds identified above. Along the northern and western façades of the project site, lighting overflow was below detectable thresholds. Along 60th Street to the south, lighting was measured from the south side of the street. The overflow of lighting remained at or below 0.1 foot-candles

Figure 3.10-6

for all areas east of the utility entrance for the premises, and between 0.1 and 0.2 foot-candles between the utility entrance and the patron entrance along 60th street. Along 104th Avenue, lighting was measured using the same technique. Overflow of lighting was below detectable thresholds along the majority of the project site, though spiked at 0.1 foot-candles briefly adjacent to the employee entrance.

KESHENA SITE

Regional Viewshed

The regional viewshed surrounding the Keshena site is primarily a simple commuter viewshed without distinct vistas (**Figure 3.10-7**). The area is largely forested, limiting distance and variation of line of sight aspects. Commuters along Highway 47/55 experience a view of the existing Menominee Casino-Bingo-Hotel within 1/16 mile approach from north or south. Northbound commuters experience the Keshena site on their left, while southbound commuters experience it on their right.

Other land uses in the area of the Keshena site include light industry, retail, schools and residential. These are moderately distributed in the immediate region of the Keshena site, situated within clearings and mainly isolated from the Keshena site's viewshed by treelines and forested areas. In addition, portions of the Wolf River, west of the Keshena Site, are designated wild and scenic areas according to the Wild and Scenic Rivers Act (16 USC 1271-1287).

Lighting and Glare

The significance criteria identified in the Lighting and Glare discussion under the Kenosha Site also apply here. The only source for lighting that overflows off-site is from the front signage at the Menominee Casino-Bingo-Hotel. This, however, is limited by the roadway curvature of Highway 47/55, and the distribution of trees in the vicinity. On-site illumination is provided for surface parking areas at night, and is downcast.

Figure 3.10-7